

BRUCE L. BROWN JR. *et al.*
Application No. 10/742,329
Reply to Office Action of August 31, 2007

PATENT

Amendments to the Drawings:

Replacement sheets for Figs. 1-3 are attached. These sheets, which include Figs. 1-3, replace the original sheets including Figs. 1-3.

Attachment: Replacement Sheets

REMARKS

This paper is responsive to the Office Action mailed August 31, 2007. Claims 1-19 are currently pending in the above-identified application. Claims 1, 3, 4, 8, and 15 have been amended. As discussed in greater detail below, support for the amended claims can be found in the specification, and therefore, no new matter has been added. Reconsideration and withdrawal of the rejections are respectfully requested in view of the foregoing amendments and following remarks.

Drawing Objections

Figures 1-3 were objected to for not including a legend such as --Prior Art--. In response, Applicants have submitted replacement drawing sheets.

Claim Rejections Under 35 U.S.C. §112

Claims 1-2, 8, and 15 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as the invention. In response, Applicants have submitted amendments to the claims that address all of the 35 U.S.C. §112, second paragraph, issues raised by Examiner. Claims 1, 8, and 15 have been amended to further recite: the delay period being less than or equal to a maximum tolerable delay, the maximum tolerable delay being the longest delay that would be tolerated by a valid client. Additionally, claims 1 and 8 have been further amended to eliminate the recitation of "possible."

Support for the above discussed amendments concerning the delay period can be found in the specification. In particular, the following quotations are illustrative: a) "However, according to embodiments of the present invention, the timing for sending the greeting command is slightly delayed so that the actual greeting message is not sent until Greeting 402" (see paragraph [0025]); b) "During this period, if the connection receives any incoming data on the connection then the mail server knows that the client is not adhering to the SMTP protocol and is most likely a spammer" (see paragraph [0006]); and c) "For a normal email session involving a

valid server, a single 5-second delay would have negligible effect on the overall message transfer" (see paragraph [0026]; implying that some greater amount of delay would have a non-negligible effect on overall message transfer that at some point would not be tolerated by a valid client). The above discussed quotations from the specification, combined with the specification itself, indicate that a range of delays up to a maximum tolerable delay can be practiced in accordance with the presently disclosed invention.

Moreover, Applicants respectfully submit that the claims, at least as currently amended, satisfy the requirements of 35 U.S.C. §112 second paragraph. The specified range of delay periods provides the reasonable degree of particularity and distinctness in light of: a) the content of the present application; b) the teaching of the prior art; and c) the claim interpretation that would be given by one possessing the ordinary level of skill in the art at the time the invention was made, as required by MPEP 2173.02. As discussed above, the content of the present application clearly envisions that a range of delays can be practiced (see paragraph [0029]). Additionally, because the teachings of the cited references fail to teach the use of a delay during which the connection is monitored for any incoming data so as to identify a spoofed connection, the presently claimed range of delay periods does not read upon the cited references. Further, a person of ordinary skill in the art can select appropriate delay periods to practice the invention based upon the interpretation the person of ordinary skill in the art would give the claim language because the claim language provides appropriate bounds inside of which the invention may be practiced.

Additionally, MPEP 2173.04 makes it clear that breadth of a claim is not to be equated with indefiniteness. Accordingly, the mere fact that the present invention envisions and claims a range of possible delay periods does not indicate that the claim language violates 35 U.S.C. §112 second paragraph.

For the reasons set forth above, Applicants respectfully request that these rejections be withdrawn.

Claim Rejections Under 35 U.S.C. §103

A. Claims 1-19 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,654,787 to Aronson *et al.* (hereinafter "Aronson") further in view of "The Next Step of the Spam Control War: Greylisting" (hereinafter "Harris").

While Applicants respectfully disagree with the rejections and do not acquiesce to the reasoning provided by the Examiner, in order to expedite prosecution, claims 1, 3, 4, 8, and 15 have been amended to: 1) address all of the 35 U.S.C. §112, second paragraph, issues raised by Examiner; and 2) clarify certain differences between the claimed invention and the cited references. As will be discussed in greater detail below for each of the independent claims, the cited references, either alone or in combination, fail to teach or suggest each and every element of the invention as recited in claims 1-19, and therefore the claimed invention is not rendered obvious by the relied-upon references.

As understood by Applicants, Aronson discloses servers and a filter for filtering email messages. In Aronson, the server receives requests to retrieve e-mail messages on behalf of a client and then retrieves e-mail messages on behalf of the client. The server then filters the e-mail messages based upon one or more rules and transfers the filtered e-mail messages to the client (see Aronson abstract). As such, and as recognized by Examiner (see Office Action bottom of page 4 through middle of page 5), Aronson fails to teach one or more elements of the presently claimed invention, as will be discussed in greater detail below for each of the independent claims.

Furthermore, it is respectfully submitted that Harris does not overcome the deficiencies of Aronson, as Harris fails to teach or suggest elements of the presently claimed invention that are missing from Aronson. Harris discloses a method for enhancing the ability of mail systems to limit the amount of spam that the mail system receives and delivers to users. The method disclosed in Harris involves the reception of three pieces of information about any particular mail delivery attempt, specifically: 1) the IP address of the host attempting delivery, 2) the sender address, and 3) the recipient address. The method of Harris requires a comparison of this "triplet" of information with entries in a locally maintained database to determine whether or not to proceed to accept the email message. If the triplet of information has not been seen before

as evidenced by the locally maintained database, the method proceeds to refuse accepting the email message and any others that may come within a certain period of time. Upon refusing to accept the email message, the method of Harris involves the transmission of a "temporary fail" message to the purported sender. The method of Harris further recognizes that a "well behaved message transfer agent (MTA) should attempt retries if given an appropriate temporary fail code for a delivery attempt" (see generally "High Level Overview"). Because any "temporary fail" message would not reach the sender associated with a spoofed connection, presumptively the method of Harris would interpret such retries as evidence that the delivery attempt is not associated with a spoofed connection.

However, as will be discussed in more detail below, as understood by Applicants, the method of Harris differs in several notable ways from the presently claimed invention. As such, Harris fails to teach or suggest the elements of the claimed invention not found in Aronson, and therefore, the combination of Aronson and Harris fails to render the claimed invention obvious.

Independent claim 1 (dependent claims 2-7) as currently amended

With regard to independent claim 1 as currently amended, the proposed combination of Aronson and Harris at least fails to teach or suggest a) *delaying sending a greeting message for a delay period*, the delay period being less than or equal to a maximum tolerable delay, the maximum tolerable delay being the longest delay that would be tolerated by a valid client (*emphasis added*); b) *monitoring the connection during the delay period; and if a command is received from the client before the greeting is sent*, then identifying the connection as the spoofed connection (*emphasis added*).

Neither Aronson or Harris teach or suggest delaying sending a greeting message for the specified delay period. As discussed above, Aronson teaches retrieving, filtering, and delivering filtered emails to a user. As such, the emails in Aronson have already been accepted from the original sender, with the teachings of Aronson concerned with filtering the already accepted emails before delivery to the user. Accordingly, Aronson does not teach or suggest delaying the sending of a greeting message to the sender so as to diagnose whether the

connection is spoofed. Because the method of Harris requires the receipt of the "triplet" of information discussed above, the receipt of which is not complete until "immediately after the RCPT command is received" (see Harris "Implementation Specification"), Harris does not teach or suggest any delay of sending a greeting message. This is because, as explained in the present application, the RCPT command is received subsequent in time to when the greeting message is sent (see present application Figs. 2, 3, and 5).

Additionally, as understood by Applicants, neither Aronson or Harris teach or suggest monitoring the connection during the specified delay period to see if the client has sent another command before being prompted to do so. Although Harris does mention the use of a delay, the delay of Harris is a delay during which the method of Harris declines to accept emails associated with specific "triplets" of information. As such, Harris does not teach or suggest monitoring the connection during a delay period for any command transmitted by the client prior to being prompted to do so.

For at least the reasons set forth above, Applicants respectfully submit that independent claim 1 and associated dependent claims 2-7, at least as currently amended, are not taught or suggested by the combination of Aronson and Harris, and as a result that the claimed invention is not rendered obvious by that combination of references. Accordingly, Applicants respectfully request that the rejections of claims 1-7 be withdrawn.

Independent claim 8 (dependent claims 9-14) as currently amended

With regard to independent claim 8 as currently amended, the proposed combination of Aronson and Harris at least fails to teach or suggest a) *delaying, for a delay period, a transmission of a reply associated with the first command*, the delay period being less than or equal to a maximum tolerable delay, the maximum tolerable delay being the longest delay that would be tolerated by a valid client (*emphasis added*); and b) *monitoring a connection between the server and the client during the delay period; and if a second command is received at the server before the reply is transmitted, then identifying the connection as the spoofed connection* (*emphasis added*).

Neither Aronson or Harris teach or suggest delaying a transmission of a reply associated with a first command for the specified delay period. For similar reasons as discussed above in the context of delaying transmission of a greeting, Aronson does not teach or suggest delaying a transmission of a reply associated with a first command for the specified delay period so as to diagnose whether the connection is spoofed. Nor does the method of Harris teach or suggest any delay of a reply, but instead teaches the selective blocking of receiving emails as discussed above. Instead, as understood by Applicants, the method of Harris involves the transmission of a reply telling the sender to "please try again later" (see Harris "Implementation Specification"), without mention of any associated delay in the sending of any reply.

Additionally, as discussed above, neither Aronson or Harris teach or suggest monitoring the connection during the specified delay period to see if the client has sent another command, in this instance a second command, before being prompted to do so.

For at least the reasons set forth above, Applicants respectfully submit that independent claim 8 and associated dependent claims 9-14, at least as currently amended, are not taught or suggested by the combination of Aronson and Harris, and as a result that the claimed invention is not rendered obvious by that combination of references. Accordingly, Applicants respectfully request that the rejections of claims 8- 14 be withdrawn.

Independent claim 15 (dependent claims 16-19) as currently amended

With regard to independent claim 15, the proposed combination of Aronson and Harris at least fails to teach or suggest an apparatus comprising: a) *means for delaying the transmitting means so that the greeting message or the reply or both are not transmitted during a delay period*, the delay period being less than or equal to a maximum tolerable delay, the maximum tolerable delay being the longest delay that would be tolerated by a valid client (*emphasis added*); and b) *means for monitoring the connection to detect commands that are sent by the client device at least during the delay period* (*emphasis added*).

Neither Aronson or Harris teach or suggest a means for delaying the transmission of a greeting message or a reply for the specified period. As discussed above, Aronson does not teach or suggest delaying a transmission of a greeting message or a reply for the specified period

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so as to diagnose whether the connection is spoofed. As discussed above, the method of Harris does not teach or suggest the use of delays in transmission of any greeting or response, but instead has a delay period during which emails are not accepted based upon the associated "triplet" of information as discussed above.

Additionally, because neither Aronson or Harris teach or suggest the use of delayed responses in determining whether a connection is spoofed, they likewise do not teach or suggest the monitoring of the connection during such a delay period, since they have no such delay period.

For at least the reasons set forth above, Applicants respectfully submit that independent claim 15 and associated dependent claims 16-19, at least as currently amended, are not taught or suggested by the combination of Aronson and Harris, and as a result that the claimed invention is not rendered obvious by that combination of references. Accordingly, Applicants respectfully request that the rejections of claims 15-19 be withdrawn.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 206-467-9600.

Respectfully submitted,

December 28, 2007

Date

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